

ABSTRACT

A VSB receiver and a method for processing a receiving signal in the same are disclosed, which is not subject to frequency offset. The VSB receiver includes an intermediate frequency signal generator generating an intermediate frequency band signal from a received signal; a demodulator generating a complex base band signal consisting of an I channel signal and a Q channel signal using the intermediate frequency band signal and at least one local carrier wave signal; and a complex base band matched filter filtering at least one of the I channel signal and the Q channel signal. In the VSB receiver, since a complex signal responds to a required channel of the I channel and the Q channel, it is possible to prevent performance of the system from being deteriorated by frequency offset.